

**WHAT IS CLAIMED IS:**

1           1.     A system for managing a plurality of distributed nodes of a network,  
2 comprising:  
3           a recovery module configured to migrate from one network node to another,  
4 determine a status of a network node, and initiate a recovery process on a failed  
5 network node.

1           2.     The system of claim 1, wherein the recovery module comprises a  
2 routing component for determining a next hop address from an origin network node  
3 to a destination network node.

1           3.     The system of claim 2, wherein the routing component is configured to  
2 determine the next hop address based upon a routing table stored at the origin  
3 network node.

1           4.     The system of claim 1, wherein the recovery module is configured to  
2 determine the status of a network node by sending an inter-process communication  
3 to a node process.

1           5.     The system of claim 1, wherein the recovery module is configured to  
2 determine the status of a network node in accordance with a heartbeat messaging  
3 protocol.

1           6.     The system of claim 1, wherein the recovery module is configured to  
2 initiate a recovery process on a failed network node in accordance with a restart  
3 protocol.

1           7.     The system of claim 6, wherein the recovery module is configured to  
2 initiate a restart of a failed node process by transmitting a request to a process  
3 execution service operating on the failed network node.

1           8.     The system of claim 1, wherein the recovery module is configured to  
2 transmit a node status message to a network management module operating at a  
3 network management network node.

9. The system of claim 8, wherein the node status message comprises information obtained from a log file generated at the failed network node.

10. The system of claim 1, further comprising a network management module configured to launch a plurality of recovery modules into the network.

11. A method for managing a plurality of distributed nodes of a network, comprising:

- migrating from one network node to another;
- determining a status of a network node; and
- initiating a recovery process on a failed network node.

12. The method of claim 11, wherein migrating from one network node to another comprises determining a next hop address from an origin network node to a destination network node.

13. The method of claim 12, wherein the next hop address is determined based upon a routing table stored at the origin network node.

14. The method of claim 11, wherein the status of a network node is determined by sending an inter-process communication to a node process.

15. The method of claim 11, wherein the status of a network node is determined in accordance with a heartbeat messaging protocol.

16. The method of claim 11, wherein a recovery process is initiated on a failed network node in accordance with a restart protocol.

17. The method of claim 16, wherein a restart of a failed node process is initiated by transmitting a request to a process execution service operating on the failed network node.

18. The method of claim 11, further comprising transmitting a node status message to a network management module operating at a network management network node.

1           19.    The method of claim 11, further comprising launching into the network  
2 a plurality of recovery modules, each configured to migrate from one network node  
3 to another, determine the status of a network node, and initiate a recovery process  
4 on a failed network node.

1           20.    A computer program for managing a plurality of distributed nodes of a  
2 network, the computer program residing on a computer-readable medium and  
3 comprising computer-readable instructions for causing a computer to:  
4           migrate the computer program from one network node to another;  
5           determine a status of a network node; and  
6           initiate a recovery process on a failed network node.